REMARKS

The claims have been amended to more clearly define the invention as disclosed in the written description. In particular, the claims have been amended for clarity. Applicants declare that the above changes are formal in nature only and do not affect the scope of the claims.

The Examiner has rejected claims 1-20 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,067,362 to Lemanski et al. The Examiner has further rejected claim 11 under 35 U.S.C. 103(a) as being unpatentable over Lemanski et al. in view of U.S. Patent 7,120,651 to Bamford et al.

Applicants would like to point out that Bamford et al. is an improper reference in that the filing date thereof, to wit, April 23, 2004, falls after the priority date, December 16, 2002, of the subject application. Further, the filing dates of the parent applications, of which Bamford et al. is a continuation-in-part, i.e., September 17, 2003 and November 21, 2003, also fall after the priority date of the subject application. Applicants had perfected their entitlement to the priority date by filing a certified copy of the priority document, EP02080309.4, with the filing of this application. Applicants note that a translation of the priority document is not needed in that the priority document is already in English.

In view of the above, any rejection based on Bamford et al. must fall.

The Lemanski et al. patent discloses mechanical resonance reduction, in which an input audio signal is applied to a notch filter 42 having a predetermined notch frequency, the output from the filter is subtracted from the input audio signal in an input combiner 44, and the output of the input combiner 44 is applied to a variable gain cell 48. A threshold detector 52 then checks the output signal from the variable gain cell 48 and modifies the gain thereof. Finally, the output from the variable gain cell 48 is combined with the output from the notch filter in an output combiner 47. The output signal from the output combiner 47 may then be applied to a power amplifier 34 and loudspeaker 14.

The subject invention relates to operating a storage device sensitive to vibration in an environment having a source of vibrations. As claimed in claim 1, the method of the subject invention includes "monitoring the performance of the storage device; and "when the performance of the storage device decreases below a pre-determined level, taking action to reduce the influence of vibrations generated by the source of vibrations".

As noted in MPEP § 2131, it is well-founded that "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California,* 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Further, "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v.*

Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

The Examiner has indicated that Lemanski et al. discloses "monitoring the performance of the storage device (see column 1, lines 8-19)".

Applicants submit that the Examiner is mistaken. In particular, that section of Lemanski et al. states:

> "It is an important object of the invention to reduce mechanical resonances in electromechanical devices stimulated by vibrations radiated by audio systems.
> "According to the invention, an audio system for use with an electromechanical apparatus includes a device coupled to the audio system. The device has a mechanical resonance stimulated by spectral components of vibrations from the audio system. The audio system includes an input for receiving audio signals and a gain reducer. The gain reducer includes a detector which detects the presence of the spectral components in the audio signals and a gain cell which reduces the gain of the audio signals responsive to the detector."

By merely reading this section of Lemanski et al., it should be apparent that there is no disclosure or suggestion of a storage device, nor the monitoring of the performance of the storage device. Rather, Lemanski et al. predetermines a problematic frequency component and sets a notch filter at that frequency. Lemanski et al. then determines the signal level of the input audio signal at the frequency of the notch filter and if the signal level is above a predetermined threshold, adjusts a variable gain cell accordingly.

The Examiner has further indicated that Lemanski et al. discloses "when the performance of the storage device decreases below a predetermined level (having a frequency in narrow range see

column 1, lines 25-28) taking action to reduce the influence of vibrations generated by the source of vibrations (see column 1, lines 29-34)".

Again, Applicants submit that the Examiner is mistaken. In particular, these sections of Lemanski et al. state:

> "...detecting, in audio signals being transmitted to the audio system, the presence of spectral components having a frequency in the predetermined narrow frequency range, and reducing the gain, narrowband or broadband, of the audio signals."

and

> "In still another aspect of the invention, a mechanical resonance reduction apparatus includes an input for receiving audio signals, an audio system radiating vibrations responsive to the audio signals, an electromechanical device having a mechanical resonance responsive to spectral components of the radiated vibrations, and a gain reducer, for reducing, narrowband or broadband, the gain of the audio signals."

Applicants submit that a careful reading of the above passages indicate that there is no monitoring of the performance of a storage device, nor any indication when the performance of the storage device drops below a predetermined level. While Lemanski et al. discloses a source of vibrations, to wit, an audio system radiating vibrations responsive to the audio signals, and an electromechanical device responsive to spectral components of the radiated vibrations, Lemanski et al. does not monitor the performance of the electromechanical device, but rather, predetermines the particular spectral components, monitors the input audio signal and removes or reduces the amplitude of those particular spectral components in the input audio signal.

Claim 2 claims "wherein the performance of the storage device is indicated by service time statistics of the storage device". The Examiner has indicated that this is disclosed in Lemanski et al. "(when the amplitude of the frequency at different point in the gain reducer, see column 1, lines 45-48)".

The portion of Lemanski et al. states:

> "FIGS. 4A-4E are a series of plots of amplitude vs. frequency at various points in the frequency selective variable gain reducer of FIG. 3".

Again, it should be apparent that this has nothing to do with "service time statistics" of the storage device. Rather, these are diagrams showing the signal at various places in the variable gain cell. There is no disclosure of service time statistics.

The subject specification, on page 7, lines 8-14, states "In the embodiment of the invention described by means of Fig. 1, the control unit 150 keeps statistics on the access time of the storage device 108. When the average access time is too long for a certain amount of time, say over 500 milliseconds for a period of 10 seconds, action is taken. Of course, various related embodiments are obvious to those skilled in the art, such as taking action when the median access time is too high, the maximum access time is too high or the standard deviation of the access time is too high." Hence, there is clear support for the claim 2 limitation.

With regard to claim 3, the Examiner states "Lemanski discloses wherein the performance of the storage device is indicated by the average bit-rate of the storage device (see column 2, lines 57-64)."

This section of Lemanski et al. states:

> "If the amplitude of spike signal 58 exceeds a threshold amplitude, the threshold detector 52 issues a gain control signal to variable gain cell 48, which causes the variable gain cell to attenuate spike signal 58 until it is below the threshold amplitude. The attenuated spike signal 59 is then recombined with filtered signal 56 by output combiner 47 to yield notched or restored output signal 60 at gain reducer output terminal 54."

It is unclear to Applicants how the Examiner is reading this section in order to read on that which is claimed in claim 3. This section of Lemanski et al. has nothing to do with the performing of the storage device being indicated by the average bit-rate.

With regard to claim 4, the Examiner states "Lemanski discloses wherein the action comprises the step of providing a message to a user to reduce the vibrations (see column 2, lines restored the output signal 60 at gain reducer output terminal, 63-64)."

Applicants believe that the Examiner means lines 61-64, which state:

> "The attenuated spike signal 59 is then recombined with filtered signal 56 by output combiner 47 to yield notched or restored output signal 60 at gain reducer output terminal 54."

The signal at the output of the gain reducer is an audio signal for application to, for example, the power amplifier 34 and the loudspeaker 14 as shown in Fig. 2 of Lemanski et al. However, there is no disclosure or suggestion in Lemanski et al. of "providing a message to a user to reduce the vibrations".

Claim 7 claims "wherein when the performance decreases below the pre-determined level and the environmental temperature of the storage device is above a further pre-determined level, no action is taken". The Examiner has indicated that this limitation is disclosed in Lemanski et al. at col. 2, lines 60-64.

Applicants submit that this is ridiculous! This section of Lemanski et al. is reproduced above and it should be apparent that there is not disclosure of suspending the action based on low performance with the environmental temperature is above a predetermined level. In fact, Lemanski et al. does not even contain the term "temperature".

In view of the above, Applicants believe that the subject invention, as claimed, is neither anticipated nor rendered obvious by the prior art, and as such, is patentable thereover.

Applicants believe that this application, containing claims 1-20, is now in condition for allowance and such action is respectfully requested.

Respectfully submitted,

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